

REMARKS

In the present Amendment, claims 1, 8 and 9 have been amended to recite the definition of "Archimedes method." Support for this amendment is found, for example, at page 10, lines 17-21 of the specification. No new matter has been added, and entry of the Amendment is respectfully requested.

Claims 1-21 are pending.

Initially, the Examiner is respectfully requested to return a complete initialed copy of Form PTO-1449 for the Information Disclosure Statement filed October 12, 2005, EP 1137021 was not initialed.

The Examiner required a new Abstract to be presented on a separate sheet, apart from any other text.

In response, Applicant submits herewith a new Abstract as requested by the Examiner.

The Examiner objected to claim language appearing in the specification.

The disclosure at page 3, line 31 to page 8, line 11 is not claim language, but rather provides written description support for the claims. In fact, the word "claim" is not mentioned at pages 3-8 of the specification. Withdrawal of the objection to the specification is respectfully requested.

Claims 5-7 and 18 were objected to as being in improper multiply dependent form.

Claims 5, 6, 7, 10, 18 and 19 were amended to remove multiple dependency in the Preliminary Amendment filed October 12, 2005. Accordingly, withdrawal of the objection to claims 5-7 and 18 is respectfully requested.

Claims 1, 8 and 9 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner considered "Archimedes method" in claims 1, 8 and 9 to be unclear.

As noted, claims 1, 8 and 9 have been amended to recite the definition of "Archimedes method." Withdrawal of the § 112 rejection of claim 1, 8 and 9 is respectfully requested.

Claims 1-21 were rejected under 35 U.S.C. § 102(a) as being anticipated by EP 1317021 A1.

Claims 1-21 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by WO 02/092864.

Applicant submits that these two rejections should be withdrawn because EP '021 or WO '864 do not disclose or render obvious the present invention.

The Examiner considered that both of EP '021 and WO '864 disclose a sintered body electrode for capacitors meeting each of the terms of the rejected claims, including a pseudo-closed porosity of 11% or less as required by independent claims 1, 8 and 9. The "pseudo-closed porosity" is the value obtained by dividing the difference between the volume of a sintered body measured under atmospheric pressure and the volume measured in a vacuum, which are determined according to the Archimedes method, by the volume measured under atmospheric pressure as defined in present claims 1, 8 and 9.

In response, Applicants submit herewith the executed Declaration Under Rule 37 C.F.R. § 1.132 of Mr. Naito, the Inventor of the present application, to demonstrate that the sintered body electrodes of EP '021 and WO '864 do not have a pseudo-closed porosity of 11% or less as claimed. In this regard, Applicant measured the pseudo-closed porosity of representative Examples disclosed in EP '021 and WO '864, the results of which are set forth in the Table at page 3 of the Declaration.

Applicant made the above measurements on Examples where the CV values were high or where the porosity values were relatively high and the capacitance values were high (that is,

where the data were close to those of the present application). All of the values obtained in the measurement fall outside the scope of "a pseudo-closed porosity of 11% or less" as required by present claims 1, 8 and 9.

Accordingly, both EP '021 and WO '864 do not describe or otherwise disclose a sintered body electrode for capacitors having a pseudo-closed porosity of 11% or less as required by present claims 1, 8 and 9, and for this reason alone the present claims define novel subject matter.

Applicant further comments on patentability of the present claims over the cited prior art as follows.

In accordance with the invention, by providing a sintered body having a pseudo-closed porosity of 11% or less, preferably 7% or less, a capacitor element prepared therefrom employing a semiconductor layer as a counter electrode can exhibit a higher capacitance appearance factor (page 10, lines 7-12 of the specification).

In conventional capacitors, the capacitance appearance factor decreases when the volume of the sintered body electrode exceeds 4 mm³. However, in the present invention, even when the sintered body electrode has a large volume, the resulting capacitor can advantageously exhibit a good capacitance appearance factor (page 12, lines 24-29).

In EP '021, the sintered body is electrolytically oxidized in aqueous 0.1 wt % phosphoric acid solution so as to form a dielectric thereon (see paragraph [0041] of EP '021). However, in 0.1 wt% phosphoric acid solution, an oxide film (a dielectric layer) is formed on the sintered body. The oxide is not etched.

By simply leaving the sintered body in 0.1 wt% phosphoric acid solution, etching does not proceed. The acidity of the solution determines whether or not etching can proceed.

Moreover, in order to obtain a sufficiently etched surface, it is necessary to carry out electrochemical etching in an alkaline solution after treatment with fluorinated acid as conducted in the Examples of the present invention. Electrolysis in an alkaline solution does not form an oxide film.

Thus, a pseudo-closed porosity of 11% or less as claimed is not readily achieved.

In view of the above, reconsideration and withdrawal of the §102(a) rejections based on EP '021 or WO '864 are respectfully requested.

Allowance is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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WASHINGTON OFFICE
23373
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Date: February 14, 2008

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q75225

Kazumi NAITO

Appln. No.: 10/552,589

Group Art Unit: 2831

Confirmation No.: 2258

Examiner: Nguyen T HA

Filed: October 12, 2005

For: SINTERED BODY ELECTRODE AND SOLID ELECTROLYTIC CAPACITOR USING
THE ELECTRODE

DECLARATION UNDER 37 C.F.R. § 1.132

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Kazumi Naito, hereby declare and state:

I am a citizen of Japan.

I am a fellow of SHOWA DENKO K.K., the assignee of the above-named application.

I am the inventor of the invention described and claimed in the above-named application, and I am familiar with the Office Action dated September 14, 2007 concerning my application. Therein, the Examiner considered that both of EP 1137021 A1 (EP '021) and WO 02/092864 (WO '864) discloses a sintered body electrode for capacitors meeting each of the terms of the rejected claims, including a pseudo-closed porosity of 11% or less as required by independent claims 1, 8 and 9.

By "pseudo-closed porosity" I mean the value obtained by dividing the difference between the volume of a sintered body measured under atmospheric pressure and the volume

Declaration under 37 C.F.R. § 1.132
U.S. Application No.: 10/552,589

Attorney Docket No.: Q75225

measured in a vacuum, which are determined according to the Archimedes method, by the volume measured under atmospheric pressure as defined in claims 1, 8 and 9 of my above-identified application. I am also a co-inventor of both EP '021 and WO '864.

In order to demonstrate that the sintered body electrodes of EP '021 and WO '864 do not have a pseudo-closed porosity of 11% or less as claimed, I measured the pseudo-closed porosity of representative Examples disclosed in EP '021 and WO '864, the results of which are set forth in the Table below.

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U.S. Application No.: 10/552,589

Attorney Docket No.: Q75225

EP '021	Example	Pseudo-closed Porosity (%)
	1	17
	2	17
	3	18
	4	17
	5-1	14
	5-2	14
	5-3	14
WO '964	Example	Pseudo-closed Porosity (%)
	1	13
	2	14
	3	13
	4	13
	5	13
	6	13
	26	15
	32	12
	35	13
	37	13

Declaration under 37 C.F.R. § 1.132
U.S. Application No.: 10/552,589

Attorney Docket No.: Q75225

I made the above measurements on Examples where the CV values were high or where the porosity values were relatively high and the capacitance values were high (that is, where the data were close to those of my present application). All of the values obtained in the measurement fall outside the scope of "a pseudo-closed porosity of 11% or less" as required by claims 1, 8 and 9 of my above-identified application.

Accordingly, I conclude that both EP '021 and WO '864 do not describe or otherwise disclose a sintered body electrode for capacitors having a pseudo-closed porosity of 11% or less as required by claims 1, 8 and 9 of my above-identified application.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 2.08.2008

Kazumi Naito
Kazumi Naito